Renyu (Philip) Zhang

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CONTACT Information New York University Shanghai

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EDUCATION

Washington University in St. Louis, Olin Business School

St. Louis, MO

Ph.D. Operations Management

05/2016

- Thesis: Dynamic Pricing and Inventory Management: Theory and Applications
- Advisors: Nan Yang, Fuqiang Zhang

Peking University, School of Mathematical Sciences

Beijing, China

B.S. Mathematics

07/2011

ACADEMIC POSITION New York University Shanghai

Shanghai, China

Assistant Professor of Operations Management

09/2016-

NYU Global Network Assistant Professor

07/2017-

New York University, Stern School of Business

New York, NY

Visiting Assistant Professor of Operations Management

06/2017-

NON-ACADEMIC POSITION

Kwai

Economist & Tech Lead

Beijing, China

12/2018-

Research

Interests

Methodologies

Reinforcement learning; optimization; randomized experiment; matching; game theory; mechanism design; econometrics and causal inference.

Applications

Online platforms and marketplaces; sharing economy; social networks; recommender systems; advertising; revenue management and pricing; inventory and supply chain management.

Publications

- 1. Dynamic Pricing and Inventory Management under Inventory-Dependent Demand, *Operations Research*, **62**(5), 2014, 1077-1094 (with Nan Yang).
- 2. Dynamic Pricing and Inventory Management under Fluctuating Procurement Costs, *Manufacturing & Service Operations Management*, **17**(3), 2015, 321-334 (with Guang Xiao and Nan Yang).
- 3. Dynamic Supply Risk Management with Signal-Based Forecast Multi-Sourcing, and Discretionary Selling, *Production and Operations Management*, **26**(7), 2017, 1399-1415 (with Long Gao, Nan Yang, and Ting Luo).
- 4. Trade-in Remanufacturing, Customer Purchasing Behavior, and Government Policy Manufacturing & Service Operations Management, **20**(4), 2018, 601-616 (with Fuqiang Zhang).
 - Finalist award in the POMS College of Supply Chain Management 2015 Best Student Paper Competition

Papers under Review

- 5. Competition and Coopetition for Two-sided Platforms (with Maxime Cohen).
 - Honorable Mention in the INFORMS Service Science Best Cluster Paper Award
- 6. Data Aggregation and Demand Prediction (with Maxime Cohen and Kevin Jiao).
 - Finalist in the INFORMS Data Mining Section Best Paper Award
- 7. Cold Start on Online Advertising Platforms: Data-Driven Algorithms and Field Experiments (with Zikun Ye, Dennis Zhang, Heng Zhang, Xin Chen, and Zhiwei Xu).
- 8. Social Nudges Boost Productivity on Online Platforms: Evidence from Field Experiments (with Zhiyu Zeng, Hengchen Dai, Dennis Zhang, Max Shen, Zhiwei Xu, and Heng Zhang).
- 9. Personalized Sales Targets with Customer Choices (with Xiaolong Li, Ying Rong, and Huan Zheng).
- 10. Dynamic Pricing and Inventory Management in the Presence of Online Reviews (with Nan Yang).
- 11. Dynamic Competition under Market Size Dynamics: Balancing the Exploitation-Induction Tradeoff (with Nan Yang).
- 12. Competition on Inventory Availability and Price (with Junfei Lei, Yugang Yu, and Fuqiang Zhang).
- 13. Comparative Statics Analysis of Inventory Management Models with Dynamic Pricing (with Nan Yang).
- 14. Carpool Services for Ride-sharing Platforms: Price and Welfare Implications (with Xuan Wang).

11/2020

Works in Progress

15. Recommender Systems on Platforms (with Xuan Wang and Dennis J. Zhang).

Tsinghua University, School of Economics and Management

Invited	Seminars

isingliad chiversity, school of Economics and Management	11/2020
Chinese University of Hong Kong Shenzhen, School of Data Science	11/2020
Sun Yat-sen University, Lingnan College	10/2020
Fudan University, School of Management	10/2020
National University of Singapore, Institute of Operations Research and Analytics [Violation 10/2020]	deo link]
Shanghai Jiaotong University, Antai College of Economics and Management	09/2020
New York University, Stern School of Business	09/2020
Club Bear Online Seminar [Video link]	07/2020
University of Illinois at Chicago, College of Business Administration	10/2019
Peking University, Guanghua School of Management	12/2018
Sun Yat-sen University, Lingnan College	12/2018
John Hopkins University, Carey Business School	11/2018
New York University, Stern School of Business	11/2018
Chinese University of Hong Kong, CUHK Business School	01/2018
Sichuan University, School of Business	12/2017
Washington University in St. Louis, Olin Business School	10/2017
Hong Kong Polytechnique University, Faculty of Business	08/2017
City University of Hong Kong, College of Business	08/2017
Hong Kong University of Science and Technology, HKUST Business School	08/2017
New York University, Stern School of Business	06/2017
Singapore Management University, Lee Kong Chian School of Business	04/2017

	National University of Singapore, NUS Business School	04/2017
	University of Science and Technology of China, School of Management	03/2017
	Southeast University, School of Economics and Management	12/2016
	Tsinghua University, School of Economics and Management	12/2016
	Shanghai Jiaotong University, Antai School of Economics and Management	12/2016
	University of Toronto, Rotman School of Management	11/2016
	Nanjing University, School of Management and Engineering	09/2016
	Southwest University of Finance and Economics, School of Business Administration	07/2016
	Southwest Jiaotong University, School of Economics and Management	07/2016
	Shanghai University of Finance and Economics, School of Business Administration	02/2016
	New York University Shanghai	02/2016
	University of Texas at Dallas, Jindal School of Management	01/2016
	New York University, Stern School of Business	01/2016
	Chinese University of Hong Kong, SEEM Department	01/2016
	Hong Kong University of Science and Technology, HKUST Business School	01/2016
	Hong Kong University of Science and Technology, IELM Department	01/2016
	Hong Kong Polytechnique University, Faculty of Business	01/2016
	City University of Hong Kong, College of Business	01/2016
Conference Talks	INFORMS Annual Meeting 2020	11/2020
	National Science Foundation of China, PI Meeting	10/2020
	INFORMS Annual Meeting 2019	10/2019
	Data-Driven and Innovative Operations Workshop,	06/2019
	POMS-HK Conference 2019	01/2019
	Young Scholars' Forum on Management Science 2019	01/2019
	INFORMS Annual Meeting 2018	11/2018
	Operations Management under "Internet+" Environment	08/2018
	MSOM Conference 2018	07/2018
	Revenue Management and Pricing Annual Conference 2018	06/2018
	Revenue Management Workshop	05/2018
	POMS Conference 2018	05/2018
	POMS-HK Conference 2018	01/2018
	Young Scholars' Forum on Management Science 2017	12/2017
	INFORMS Annual Meeting 2017	10/2017
	MSOM Conference 2017	06/2017
	POMS-HK Conference 2017	01/2017
	INFORMS Annual Meeting 2016	11/2016
	CSAMSE Annual Conference 2016	07/2016
	Revenue Management and Pricing Annual Conference 2016	06/2016
	POMS Annual Meeting 2016	05/2016
	Decision Science Institute Annual Conference 2015	11/2015
	INFORMS Annual Meeting 2015	11/2015
	MSOM Annual Conference 2015	06/2015
	POMS Annual Meeting 2015	05/2015
	INFORMS Annual Meeting 2014	11/2014

	MSOM Annual Conference 2014 INFORMS Annual Meeting 2013 INFORMS Annual Meeting 2012	06/2014 $10/2013$ $10/2012$
Honors, Awards, and Grants	1. Finalist, INFORMS Data Mining Section Best Paper Award.	10/2019
III GIVIIVIS	 MSOM Meritorious Service Award 2018, 2019 Shanghai Eastern Scholar, Young Scientist Program QD2018053, PI 12/2021 	04/2020 , RMB 200,000/Year.01/2019-

- 12/2021

 A National Crimes Foundation of China Verna Crimatica Program 71802122 DI DMD 180 000
- 4. National Science Foundation of China, Young Scientist Program 71802133, PI, RMB 180,000. 01/2019-12/2021
- 5. Honorable Mention, INFORMS Service Science Best Cluster Paper Award. 10/2017
- 6. Shanghai Pujiang Talent Program 17PJC074, PI, RMB 100,000. 09/2017-08/2019
- 7. Finalist Award, POMS College of Supply Chain Management Best Student Paper Competition. 05/2015
- 8. First Prize Award, Chinese Mathematics Olympiad

10/2006

TEACHING EXPERIENCES

New York University Shanghai

Instructor

• Business Analytics	Spring 2021
• Machine Learning for Business (Rating: 4.8/5)	Fall 2020
• Business Analytics (Rating: 4.2/5, 4.8/5)	Spring 2019
• Operations Management (Rating: 4.6/5)	Spring 2019
• Business Analytics (Rating: 4.4/5, 4.7/5)	Spring 2018
\bullet Competitive Advantage from Operations (Rating: $3.8/5)$	Fall 2017
\bullet Competitive Advantage from Operations (Rating: 4/5)	Spring 2017
• Competitive Advantage from Operations (Rating: 4.6/5)	Fall 2016

Business Honors Thesis Advisor

• Ziheng Wang (2020), Yiyi Zhang (2018), Yujia Ni (2018).

Kwai

Internal Instructor

• Data Driven Optimization	05/2020
• Operations Analytics	01-05/2019

Washington University in St. Louis, Olin Business School

Teaching Assistant

• Operations Management; Advanced Operations Strategy; Market Competition and Value Appropriation; Operations Planning and Control.

Professional Services

Journal Referee

Management Science, Operations Research, Manufacturing & Service Operations Management, Marketing Science, Production and Operations Management, Transportation Research: Part B, Naval Research Logistics, European Journal of Operations Research, Omega, Journal of Management Science and Engineering, Applied Mathematical Modeling, Operational Research: An International Journal.

Competition Judge

MSOM Student Paper Competition (2020, 2019, 2018, 2017).

POM College of Supply Chain Management Student Paper Competition (2020).

Conference Committee and Session Chair

Session Chair:

• INFORMS 2020, INFORMS 2018, POMS 2018, POMS-HK Conference 2018, POMS-HK Conference 2017, CSAMSE Conference 2016.

Sponsorships and Exhibits Committee member:

• POMS Annual Meeting 2016.

Professional Organization Membership

INFORMS, MSOM, RMP, APS, POMS.

Internal Services

NYU Shanghai Candidate Weekend instructor.	03/2018
NYU Shanghai Business Honors program thesis advisor.	09/2017-
NYU Shanghai Operations Management Reading Group co-organizer.	03/2017-
NYU Shanghai Housing Subcommittee member.	11/2016-05/2019
NYU Shanghai Business Research Seminar coordinator.	09/2016-08/2017
NYU Shanghai Business Honors Program guest lecturer.	10/2016-
Olin Busines School Operations Management PhD Seminar coordinator.	01/2013-12/2013

CONSULTING

Cardinal Operations

EXPERIENCES Parttime Scientist 09/2017-08/2018

Boeing Center for Supply Chain Innovation, Washington University in St. Louis

Parttime consultant. 10/2013-06/2015

PERSONAL Chinese citizen, Christian, married with one child.